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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/734,205	12/12/2000	Kaoru Okuno	50212-174	1983

20277 7590 07/28/2004

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WASHINGTON, DC 20005-3096

EXAMINER

HOFFMANN, JOHN M

ART UNIT	PAPER NUMBER
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1731

DATE MAILED: 07/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/734,205

Applicant(s)

OKUNO ET AL.

Examiner

John Hoffmann

Art Unit

1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

Claims 1 and 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roba 6371394 in combination with Jeskey 4925473.

Using Roba as the primary reference: Roba discloses the invention substantially as claimed (see previous rejections). However, Roba does not teach changing the gas flow as claimed, rather Roba discloses changing the temperature with no indication as to how to do it: see col. 7, lines 1-7 and col. 11, lines 32-35. Jeskey teaches an improved method for drawing a preform: see the paragraph spanning cols. 3-4 for the advantages. It would have been obvious to use the Jeskey method/apparatus to draw the Roba fibers, for the advantages that Jeskey teaches. Jeskey uses changes in gas flow rates to change the temperature: col. 5, lines 11-28.

Using Jeskey as the primary reference: Jeskey discloses the invention, except for the control of tension and the change in dispersion. At col. 2, lines 2-35 of Roba (and elsewhere) it is disclosed that changing the tension in the fiber results in improved performance of fibers. Col. 7, lines 4-7 of Roba teaches to change the tension by changing the temperature of the furnace. It would have been obvious to improve the Jeskey fiber method by using the Roba teaching of varying the temperature so as to change the tension so as to improve the dispersion characteristics of the fiber. It is also noted that on Page 2 of the substitute specification, Applicant admits that it is known to control the dispersion by changing the draw tension.

The tension measuring step is disclosed at col. 8, lines 29-35.

As to the heat changing being “in response to the measured glass draw tension”. Roba doesn’t explicitly mention this. However, col. 9, lines 28-34 discloses controlling the process “on the basis of the values of pre-set **process parameter** values and on the basis of the signals” from the sensors “along the tower”. Tension is a signal from a sensor along the tower, see col. 8, lines 29-35. There is no indication of any process parameter values which are “pre-set”; however col. 7, line 5 identifies the furnace temperature (and thus heat) is a **process parameter** which is controlled. It is deemed that the passage at col. 9, lines 28-34 sets forth that any of the disclosed **process parameters** could use pre-set values: since Roba only mentions a few **process parameters** it is deemed that any discussion of **process parameters** encompasses at least each of the specific **process parameters** mentioned by Roba.

Claim 3, it would have been obvious to have a heater or furnace in the same room or building, so that human operators can stay warm in the winter months. It is noted that the claims do not indicate how “close” the auxiliary heater has to be: close is a relative term. Such would be closer to the moon. Furthermore, the claim does not indicate what the heat is supplied to. It would be improper for Examiner to define the claim as requiring the heat be supplied to the preform – because the claim does not indicate such. As to the amount of heat being changed – of course over time the heat would change. A one-kilowatt heater will give out one kilowatt-hour after one hour’s

use. The heat output would change cumulatively over time: two kilowatt-hours over 2 hours, three kWhr after three hours....

Claim 4: it would have been obvious to shut off the Jeskey apparatus after the fiber is made, because there is no reason to spend money to keep it in a heated condition. It is deemed that shutting it off controls the heat dissipated and changes a dissipating condition.

Claim 5: it is deemed that during the insertion of the preform (or just prior thereto) that the positional relation is changed: from the preform being external to the tube, to the tube being external to the preform.

### ***Response to Arguments***

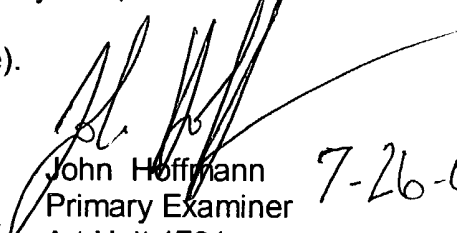
Applicant's arguments with respect to claims 1 and 3-5 have been considered but are moot in view of the new ground(s) of rejection.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Dickinson, Tateishi and Paek are cited because they discuss cooling preforms by changing gas flows.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hoffmann whose telephone number is (571) 272 1191. The examiner can normally be reached on Monday through Friday, 7:00- 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
John Hoffmann  
Primary Examiner  
Art Unit 1731

7-26-09

jmh